

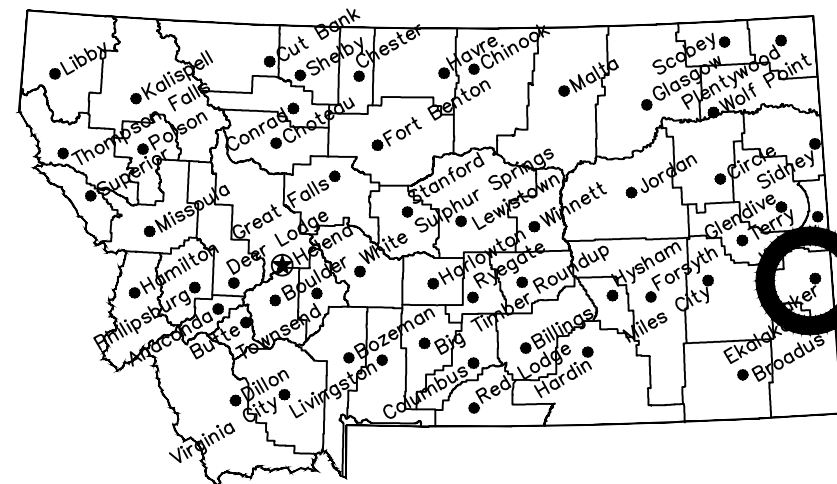
# MONTANA FISH, WILDLIFE & PARKS

# SOUTH SANDSTONE FAS

# ADA ACCESSIBLE FISHING ACCESS

FALLON COUNTY, MONTANA

FWP # 7133735

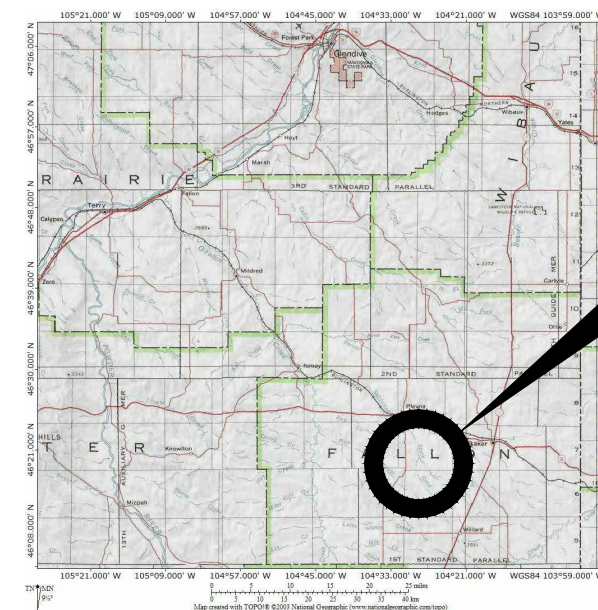


Project  
Location

Location Map

No Scale

North



Project  
Location

Vicinity Map

No Scale

MONTANA FISH, WILDLIFE AND PARKS  
DESIGN AND CONSTRUCTION

MAILING ADDRESS: PO BOX 200701  
HELENA, MT 59620-0701  
TEL 406.841.4000  
FAX 406.841.4004  
fwp.mt.gov/Doing Business/Design&Construction

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1522 9th AVENUE  
HELENA, MT 59601

## DRAWING INDEX

### Civil Sheets

Sheet Number	Sheet Title
1	TITLE SHEET
2	VICINITY MAP
3	ADA PLATFORM SITE PLAN
4	BOAT RAMP SITE PLAN
5	SITE DETAILS
6	SITE DETAILS

### Structural Sheets

Sheet Number	Sheet Title
1	PLATFORM PLAN
2	LONGITUDINAL SECTION
3	CROSS SECTION
4	PLATFORM FRAMING PLAN



J. Senn 8-25-14  
DRAWN BY: DATE:  
K. Williams 8-22-14  
CHECKED BY: DATE:

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APPROVED BY: DATE:

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TITLE SHEET  
SOUTH SANDSTONE FAS (NEAR PLEVNA, MT)

SHEET: 1 of 6

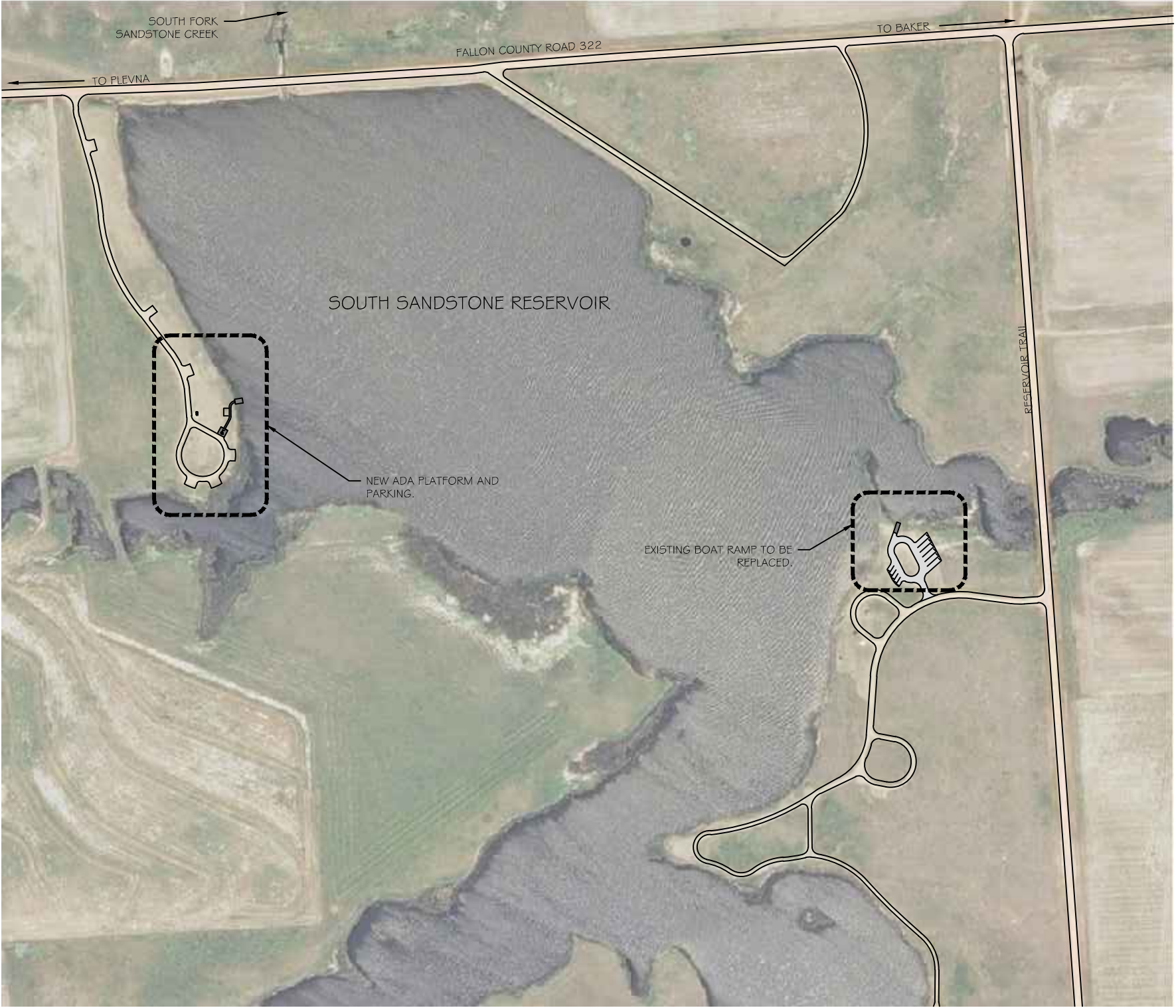
PROJECT LOCATION:  
A 357.5 ACRE TRACT OF LAND LOCATED IN THE SW 1/4 OF  
SEC. 29, T. 07N, R. 58 E, IN FALLON COUNTY, MT.

TO ACCESS THE SITE FROM PLEVNA, MT:  
HEAD SOUTH ON MAIN ST/PLEVNA RD. TOWARDS US-12 W  
FOR 5.3 MILES. TURN LEFT ONTO COUNTY ROAD 322 AND  
CONTINUE FOR 1.7 MILES. THE SITE WILL BE ON THE RIGHT.

TO ACCESS THE SITE FROM BAKER, MT:  
HEAD EAST ON GREGORY AVE FOR 1.3 MILES. TURN SOUTH  
ONTO COUNTY ROAD 322 AND FOLLOW FOR 9.2 MILES.  
THE SITE WILL BE ON THE LEFT.

# VICINITY MAP

## SOUTH SANDSTONE IMPROVEMENTS



Scale:



J. Senn	8-25-14
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K. Williams	8-22-14
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REVISED BY:	DATE:
APPROVED BY:	DATE:

APPROVED BY:	DATE:
APPROVED BY:	DATE:



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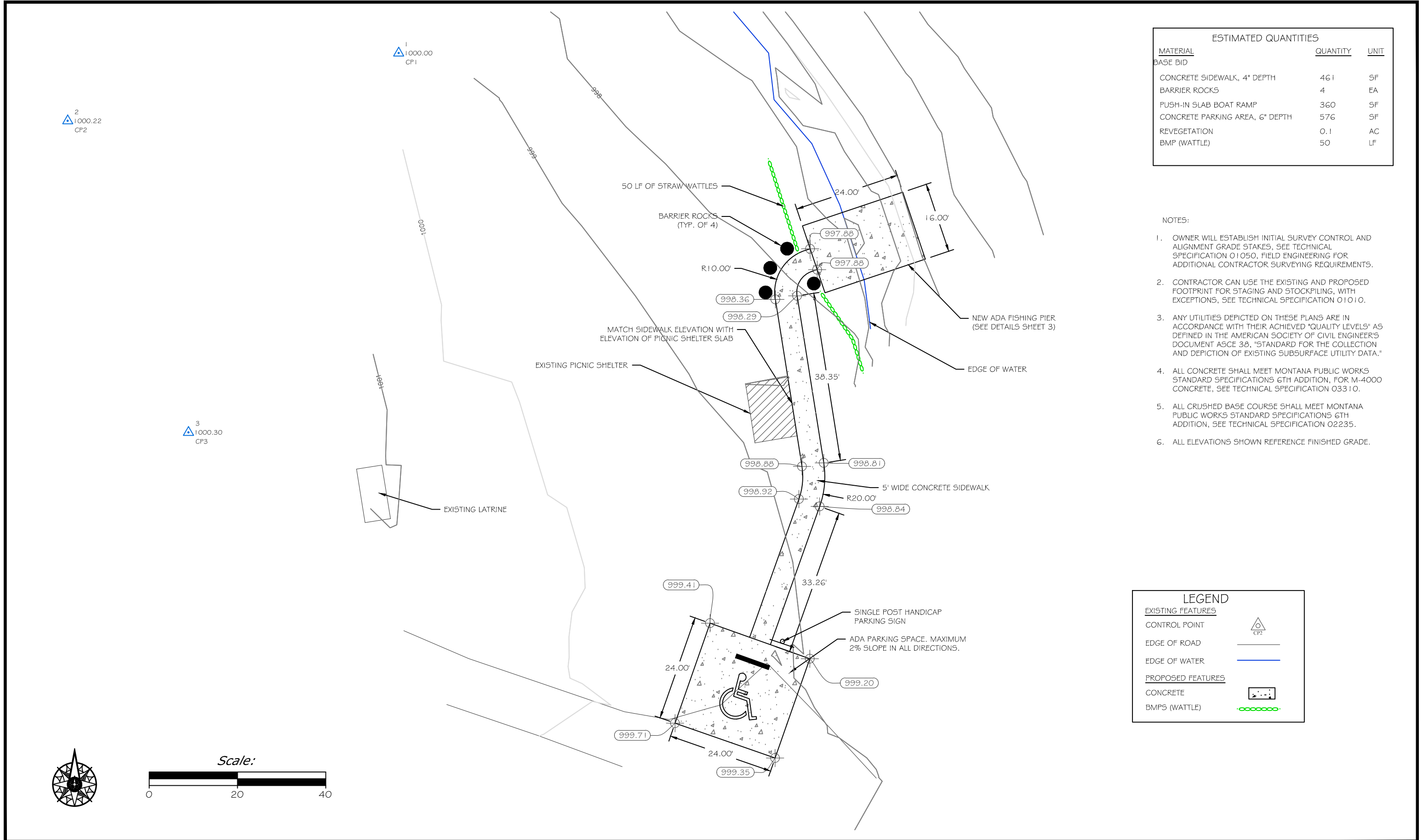
142

# VICINITY MAP

## SOUTH SANDSTONE FAS (NEAR PLEVNA, MT)

SHEET: 2 of 6

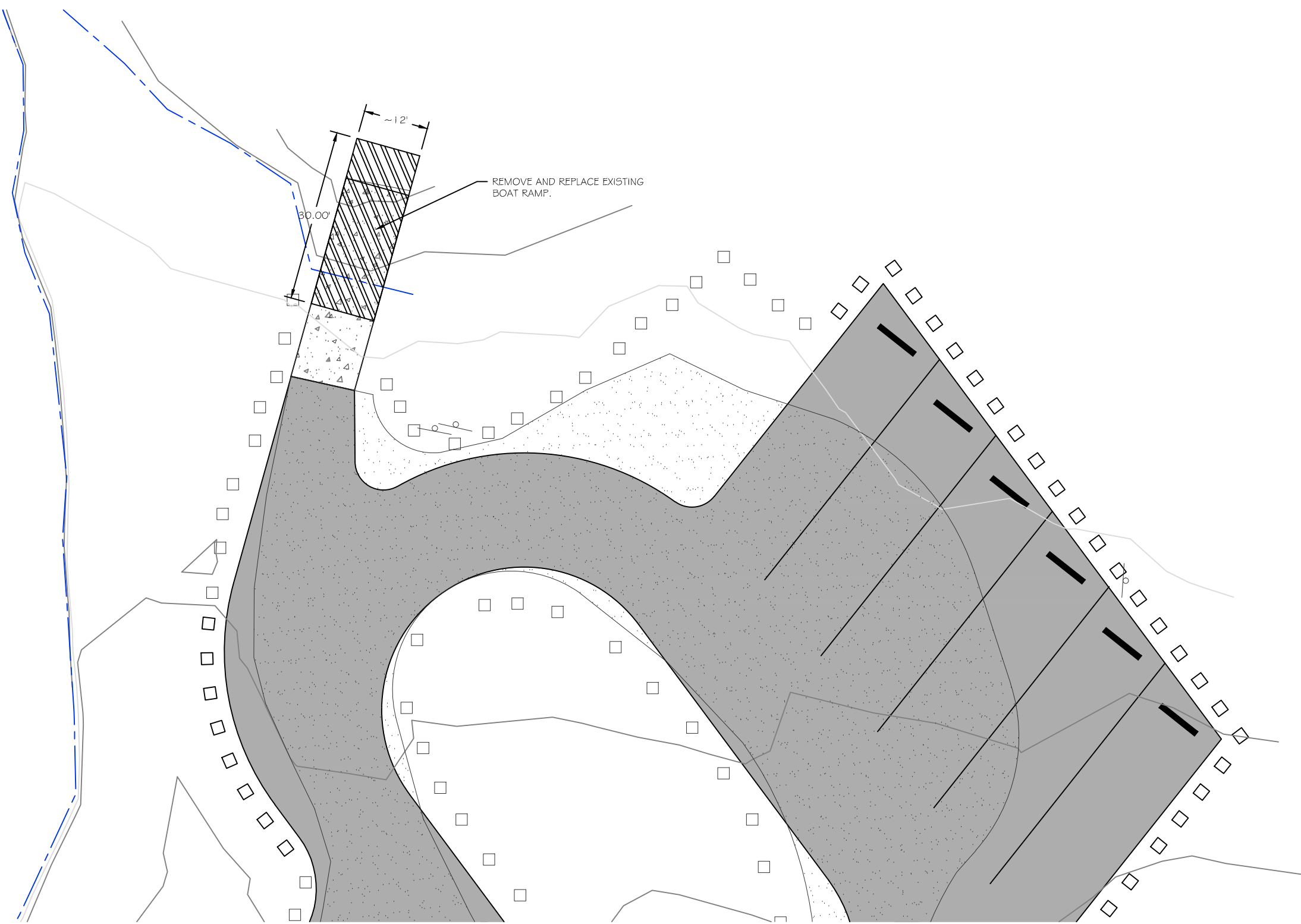




ESTIMATED QUANTITIES		
MATERIAL	QUANTITY	UNIT
BASE BID		
CONCRETE SIDEWALK, 4" DEPTH	461	SF
BARRIER ROCKS	4	EA
PUSH-IN SLAB BOAT RAMP	360	SF
CONCRETE PARKING AREA, 6" DEPTH	576	SF
REVEGETATION	0.1	AC
BMP (WATTLE)	50	LF

- NOTES:
- OWNER WILL ESTABLISH INITIAL SURVEY CONTROL AND ALIGNMENT GRADE STAKES, SEE TECHNICAL SPECIFICATION 01050, FIELD ENGINEERING FOR ADDITIONAL CONTRACTOR SURVEYING REQUIREMENTS.
  - CONTRACTOR CAN USE THE EXISTING AND PROPOSED FOOTPRINT FOR STAGING AND STOCKPILING, WITH EXCEPTIONS, SEE TECHNICAL SPECIFICATION 01010.
  - ANY UTILITIES DEPICTED ON THESE PLANS ARE IN ACCORDANCE WITH THEIR ACHIEVED "QUALITY LEVELS" AS DEFINED IN THE AMERICAN SOCIETY OF CIVIL ENGINEER'S DOCUMENT ASCE 38, "STANDARD FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
  - ALL CONCRETE SHALL MEET MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS 6TH ADDITION, FOR M-4000 CONCRETE, SEE TECHNICAL SPECIFICATION 03310.
  - ALL CRUSHED BASE COURSE SHALL MEET MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS 6TH ADDITION, FOR M-4000 CONCRETE, SEE TECHNICAL SPECIFICATION 02235.
  - ALL ELEVATIONS SHOWN REFERENCE FINISHED GRADE.

LEGEND	
<u>EXISTING FEATURES</u>	
CONTROL POINT	
EDGE OF ROAD	
EDGE OF WATER	
<u>PROPOSED FEATURES</u>	
CONCRETE	
BMPs (WATTLE)	



LEGEND

EXISTING FEATURES

EDGE OF ROAD

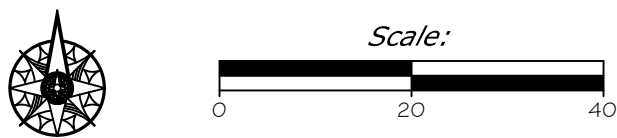
EDGE OF WATER

BARRIER POST

PROPOSED FEATURES

GRAVEL SURFACING

CONCRETE BOAT RAMP



J. Senn8-25-14

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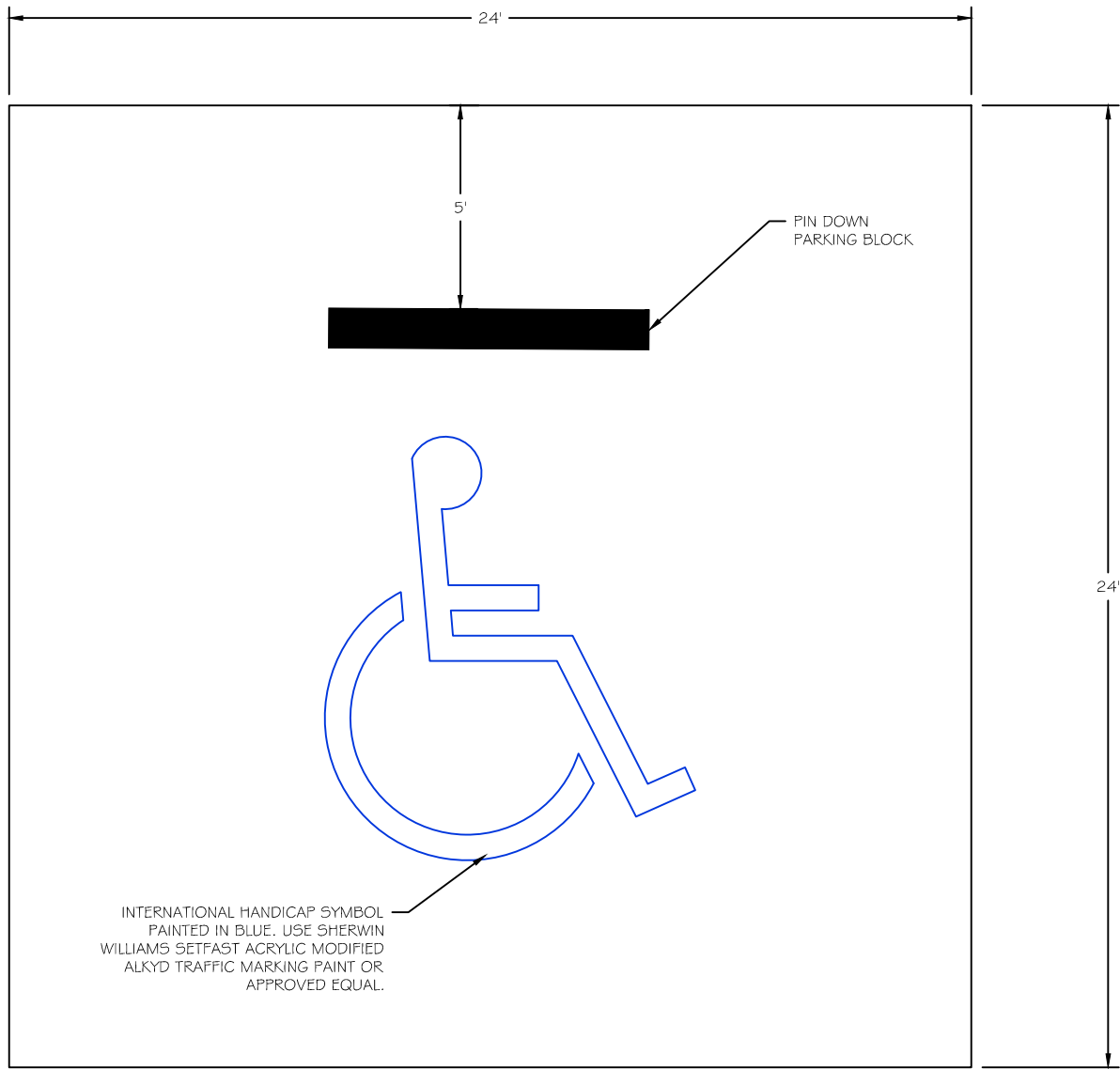


Montana Fish

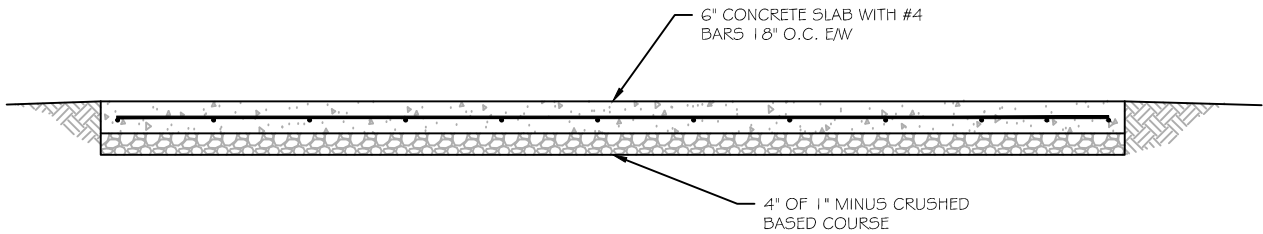
Wildlife & Parks

BOAT RAMP SITE PLAN

SOUTH SANDSTONE FAS (NEAR PLEVNA, MT)



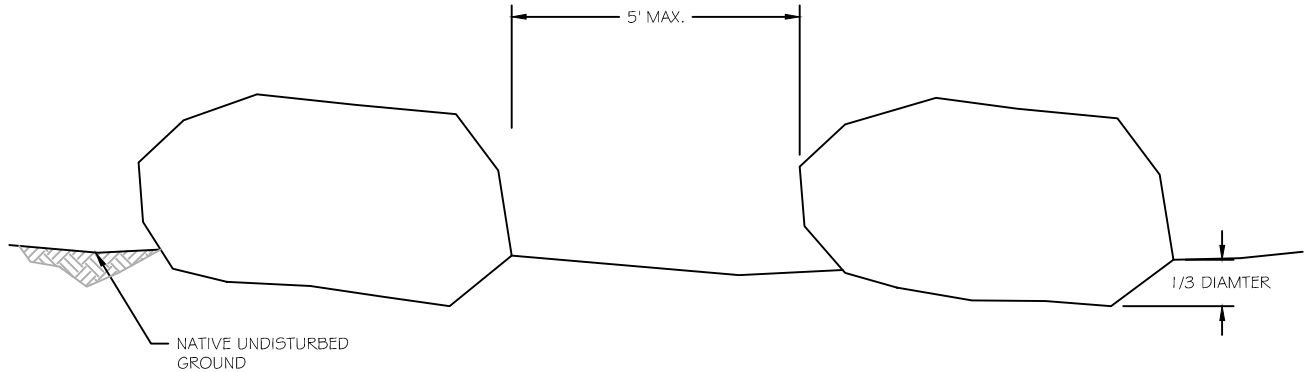
PLAN VIEW



SECTION VIEW

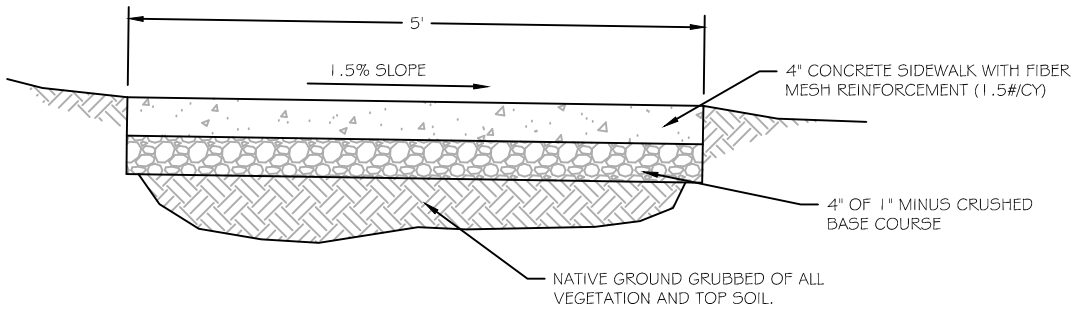
NOTES:  
1. MAX SLOPE IN ALL DIRECTIONS SHALL NOT EXCEED 2%

ADA PARKING SPACE  
(NOT TO SCALE)



BARRIER ROCK DETAIL  
(NOT TO SCALE)

NOTES:  
1. EMBED BARRIER ROCKS 1/3 OF BARRIER DIAMETER.  
2. BACKFILL EACH BOULDER WITH BARRIER ROCK EXCAVATION MATERIAL.  
3. SPACE BARRIER ROCKS AT A MAXIMUM DISTANCE OF 5 FT (EDGE TO EDGE).



TYPICAL SIDEWALK SECTION  
(NOT TO SCALE)

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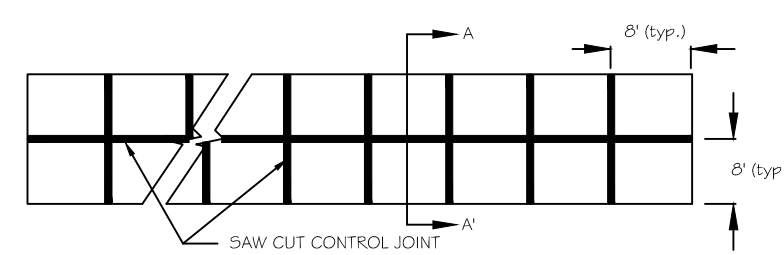
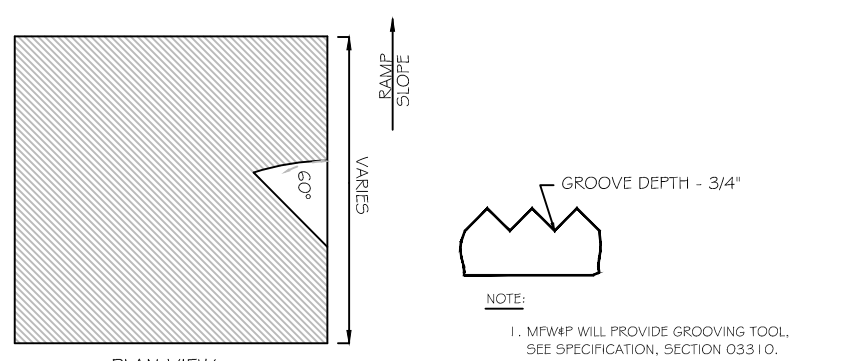
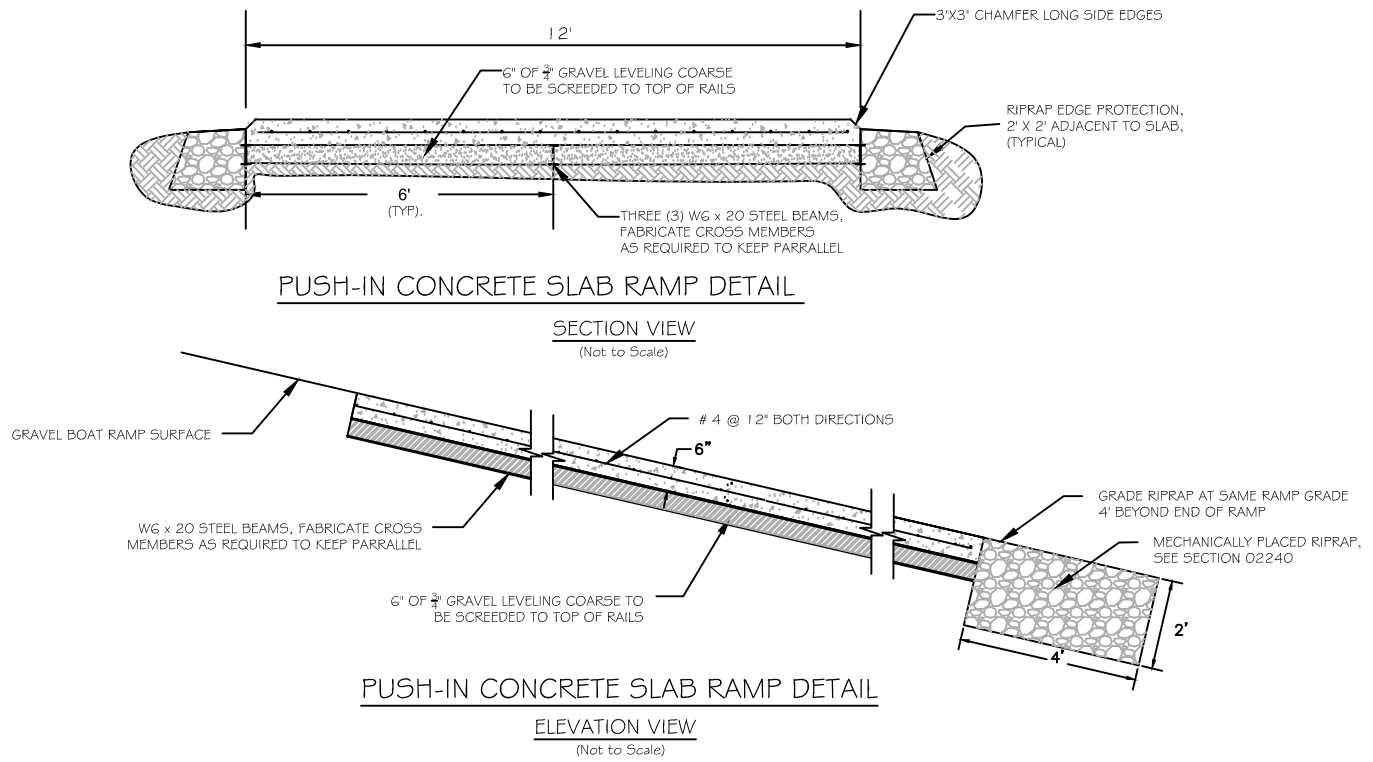
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APPROVED BY: DATE:



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# SITE DETAILS

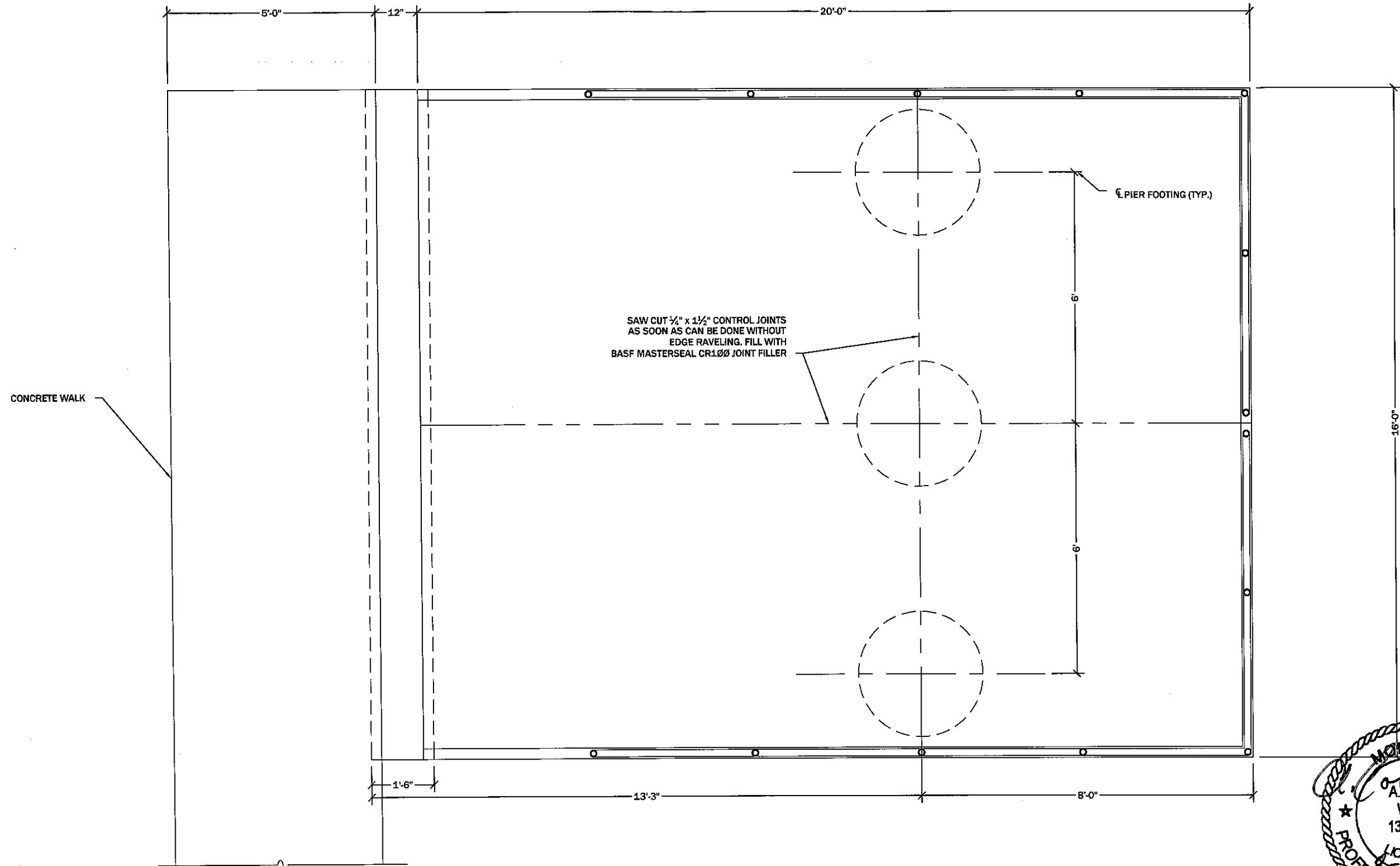
## SOUTH SANDSTONE FAS (NEAR PLEVNA, MT)



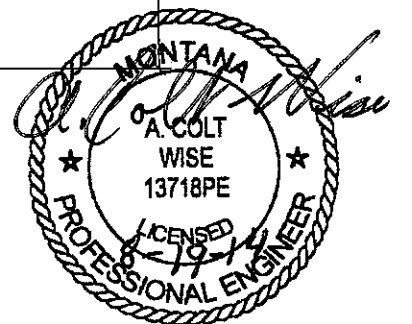
- NOTES:
1. CONCRETE FOR NEW RAMP IS A 3/4" MINUS; 6-1/2 BAG MIX WITH A MIN 28 DAY STRENGTH OF 4000 PSI, REINFORCED WITH # 4 BARS @ 12" SPACING BOTH DIRECTIONS.
  2. CONCRETE SHALL BE VIBRATED AND SCREEDED BEFORE SURFACE FINISH IS APPLIED.
  3. SURFACE FINISH SHALL BE - BULL FLOATED FOLLOWED BY GROOVING.
  4. CONTRACTION JOINTS SHALL BE TROWELLED OR SAW CUT AFTER RAMP IS GROOVED.

SLAB CONTROL JOINT DETAIL  
PLAN VIEW  
(Not to Scale)

- PUSH IN SLAB NOTES:
1. ALL PUSH-IN SLAB SECTIONS SHALL BE CAST AT APPROXIMATELY THE SAME SLOPE AS THEY ARE TO BE PLACED.
  2. ALL PUSH-IN SECTIONS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 14 DAYS.
  3. ALL PUSH IN SECTIONS SHALL BE CAST ON A SMOOTH 4" LAYER OF COMPACTED AGGREGATE.
  4. DEPENDING ON CONSTRUCTION EQUIPMENT OR WORKING AREA LIMITATIONS, CONTRACTOR MAY HAVE TO MAKE MULTIPLE PUSH-IN SLAB POURS PRIOR TO FINAL INSTALLATION. ALL SEPARATE POURS WILL REQUIRE REBAR PLACEMENT AS DESCRIBED IN NOTE 5.
  5. REBAR SHALL BE EPOXIED INTO FIRST SLAB AND EXTENDED A MINIMUM OF 20" INTO SUBSEQUENT SLAB(S).
  6. CONTRACTOR MAY ELECT TO FABRICATE ANGLE IRON ALONG EDGE OF OUTER STEEL SUPPORT BEAMS TO HELP DIRECT PUSH-IN SLAB DURING INSTALLATION.
  7. PROVIDE 2 1/2" CLEAR COVER FOR ALL REBAR REINFORCEMENT.
  8. PLACE RIPRAP EDGE PROTECTION AT THE SAME GRADE OF PUSH-IN SLAB. KEY IN RIPRAP BY MECHANICAL TAMPING METHODS TO PROVIDE FLUSH SURFACE.



**Platform Plan**



C. RICHARDS	APRIL 15, 2014	B. MANGUM	AUGUST 19, 2014	APPROVED BY:	DATE:
DRAWN BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:
C. WISE	APRIL 15, 2014	APPROVED BY:	DATE:	APPROVED BY:	DATE:
CHECKED BY:	DATE:	APPROVED BY:	DATE:	APPROVED BY:	DATE:



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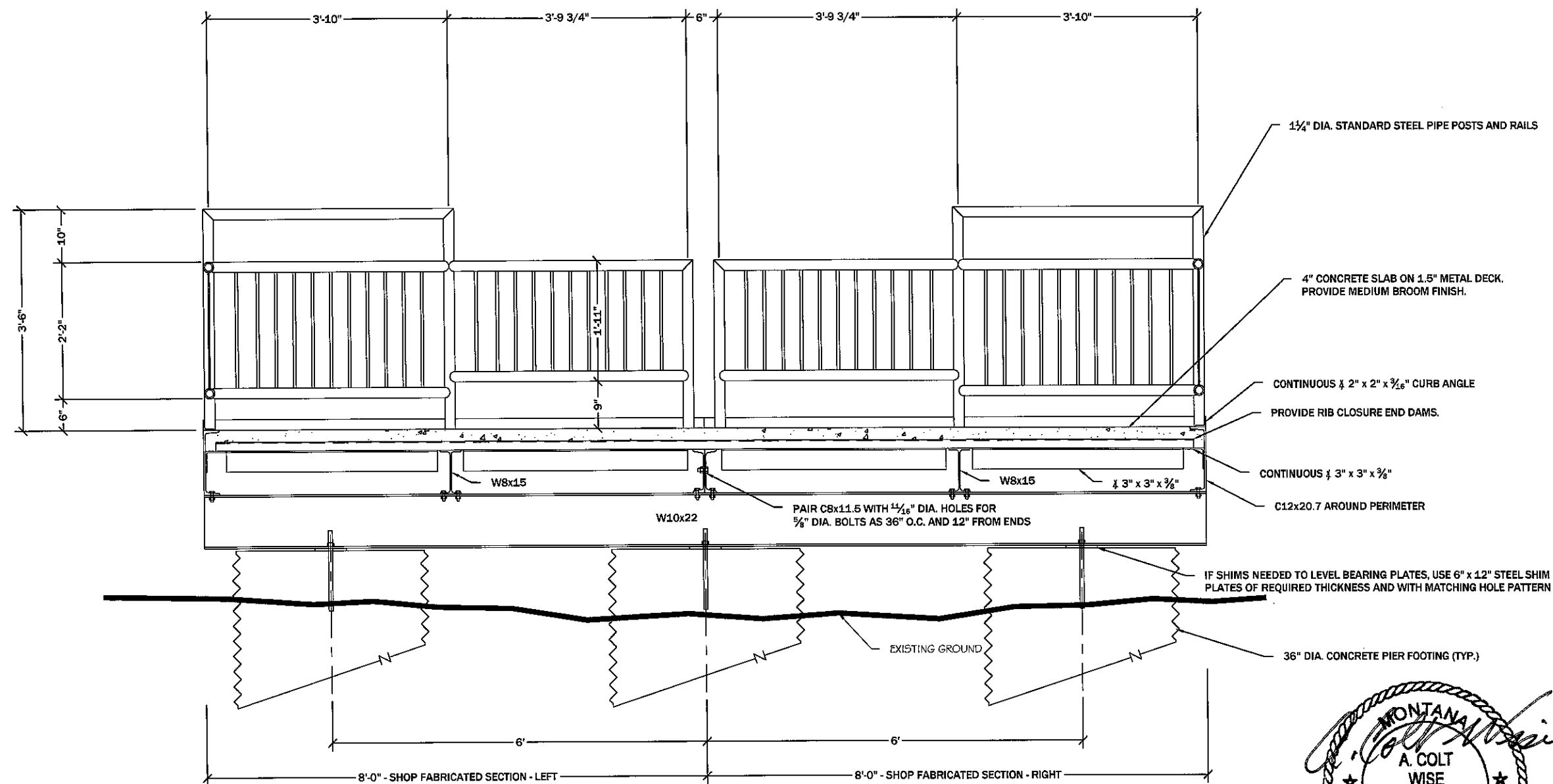
**Accessible Fishing Platform Plan**  
South Sandstone Fishing Access Site



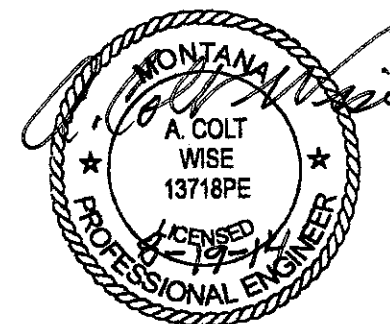
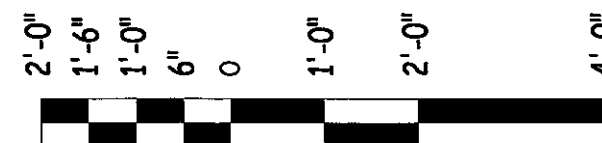
SHEET: 1 of 4







**Cross Section**



C. RICHARDS APRIL 15, 2014  
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C. WISE APRIL 15, 2014  
CHECKED BY: DATE:

B. MANGUM AUGUST 19, 2014  
APPROVED BY: DATE:  
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APPROVED BY: DATE:

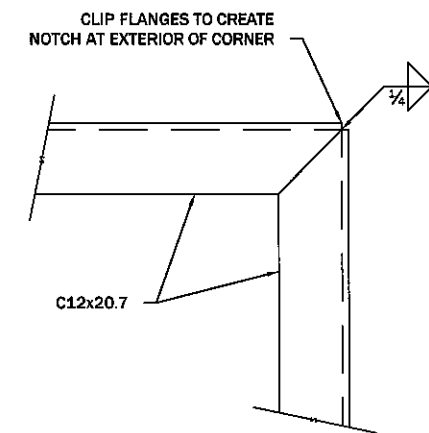
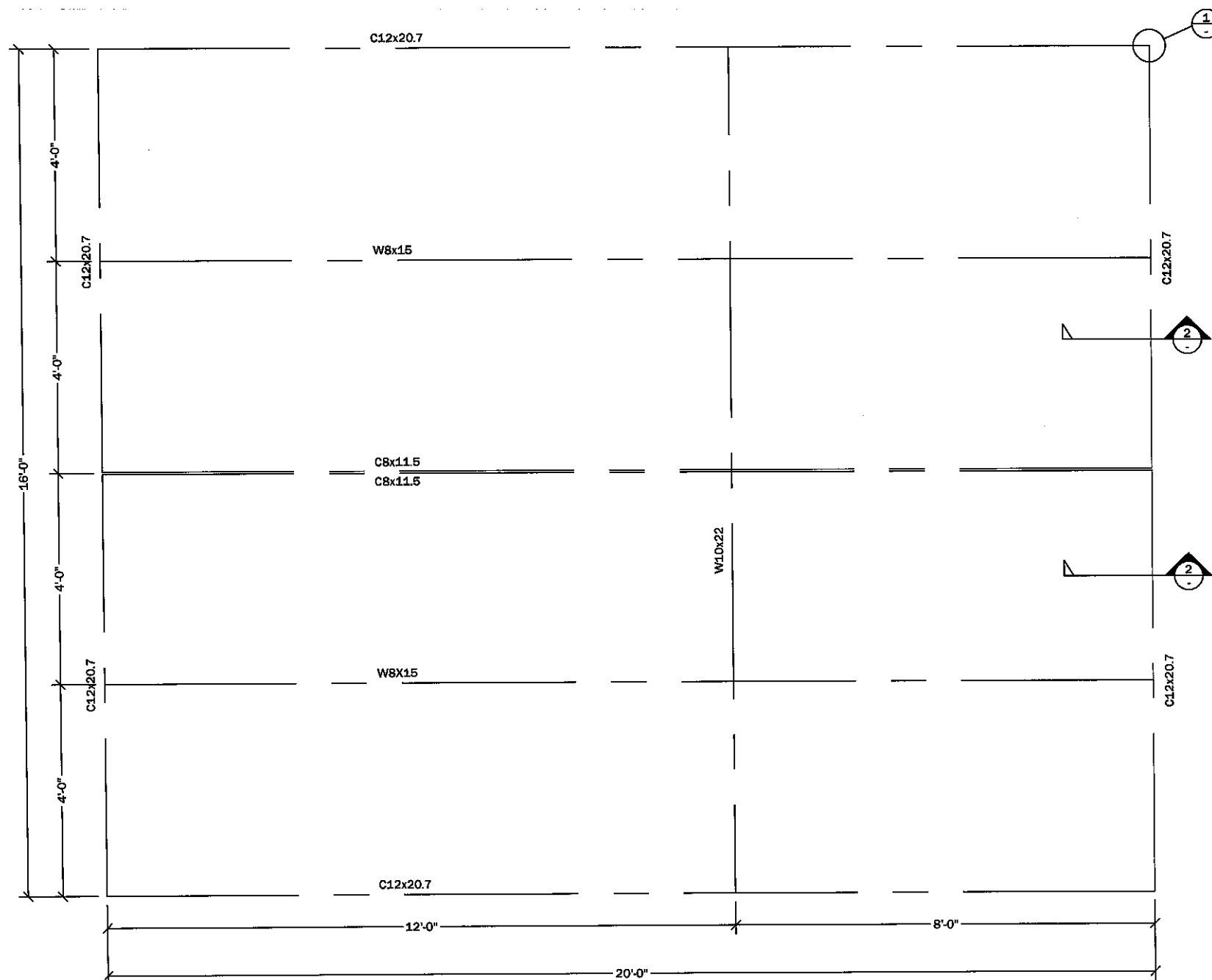


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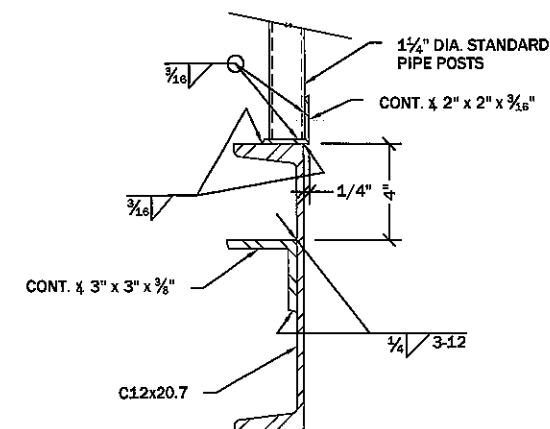
**Accessible Fishing Platform Section**  
South Sandstone Fishing Access Site



SHEET: 3 of 4

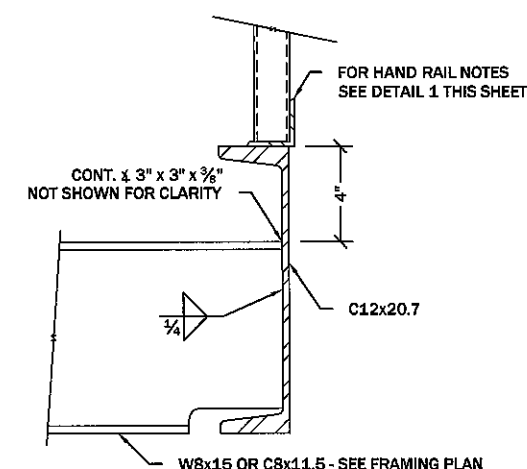


PLAN



SECTION

EXTERIOR CORNER CONNECTION 1  
1 1/2" = 1'-0"



CONNECTION DETAIL 2  
1 1/2" = 1'-0"

- GENERAL NOTES:
- SUBMIT STEEL FABRICATION SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
  - STEEL GRADES: ASTM A992 FOR WIDE FLANGE BEAMS. ASTM A36 FOR PLATES, CHANNELS AND ANGLES. ASTM A53 GRADE B FOR PIPE. ASTM 325 FOR CONNECTION BOLTS. ASTM 307 FOR ANCHOR BOLTS. ASTM A615 GRADE 60 FOR PLAIN, DEFORMED, REINFORCING BARS.
  - USE 5/8 INCH DIAMETER BOLTS FOR STEEL FRAMING CONNECTIONS. USE 3/4 INCH DIAMETER ANCHOR BOLTS.
  - ALL STRUCTURAL STEEL AND HANDRAIL TO BE HOT DIP GALVANIZED.
  - WELDER QUALIFICATIONS AND WELDING METHODS TO COMPLY WITH REQUIREMENTS OF AWS D1.1. USE E70XX ELECTRODES. TO THE EXTENT PRACTICABLE, MAKE ALL WELDS PRIOR TO GALVANIZING ASSEMBLIES. TOUCH UP WELDS MADE AFTERWARD WITH ZINC RICH, GALVANIZING REPAIR PAINT.
  - SHOP FABRICATE DECK PANELS IN TWO SECTIONS TO BE FIELD BOLTED TOGETHER AS SHOWN, WITH HANDRAIL PRE-ATTACHED.
  - USE VULCRAFT 1.5VL20 GALVANIZED METAL FLOOR DECKING. FASTEN WITH HILTI X-CR 16 P8 STAINLESS STEEL FASTENERS ON 4/36 PATTERN AT INTERIOR SUPPORTS AND AT 12 INCHES MAX ON CENTER AROUND PERIMETER. SIDELAP FASTENERS TO BE BUTTON PUNCH CRIMPS AT 24 INCHES ON CENTER.
  - CONCRETE MIX DESIGNS TO PRODUCE 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI MINIMUM, WITH 4% TO 6% ENTRAINED AIR, MAX SLUMP OF 4 INCHES, AND INCORPORATING 3/4 INCH MAX SIZE AGGREGATE. SLAB CONCRETE TO ALSO INCORPORATE FIBERMESH-150 POLYPROPYLENE FIBERS AT THE RATE OF 1.5 POUNDS OF PER CUBIC YARD. SUBMIT CONCRETE MIX DESIGNS FOR REVIEW AND APPROVAL PRIOR TO INCORPORATING INTO WORK.



## Platform Framing Plan



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C. WISE  
CHECKED BY: DATE:

B. MANGUM  
APPROVED BY: DATE:  
APPROVED BY: DATE:

APPROVED BY: DATE:  
APPROVED BY: DATE:



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Accessible Fishing Platform Framing Plan  
South Sandstone Fishing Access Site



SHEET: 4  
of 4